

REMARKS

Claims 1-16 are pending in the present application. Claims
1 and 16 are independent.

Allowable Subject Matter

Applicant appreciates the Examiner's indication that claims 3-6 and 8-15 recite allowable subject matter and would be allowed if rewritten in independent form including all of the features of the base claim and any intervening claims. For the reasons discussed below, however, Applicant believes that all of the pending claims are now in condition for allowance and earnestly solicit a formal indication thereof.

Applicant also acknowledges with appreciation the withdrawal of the previous art rejections as well as the drawing objection. Because the Examiner has discovered new art, a new art rejection is being applied.

35 U.S.C. § 103 Sonoda Rejection

Claims 1, 2, 7, and 16 are rejected under 35 USC § 103(a) as being unpatentable over Sonoda (USP 6,557,171). This rejection, insofar as it pertains to the presently pending claims, is respectfully traversed.

Although both Sonoda and the presently claimed invention are both directed to digital broadcast receiving systems, there are major differences in structure and operation which renders Sonoda inapplicable to the presently claimed invention.

Sonoda utilizes so-called preselection control information (PCI 401) that permits a user to preselect programs. Specifically, the PCI 401 enables viewers to preselect programs while a promotional program is being broadcast (see column 14, lines 45-50).

The preselection control information of Sonoda is further shown in Fig. 4 and includes screen element information 402 describing certain presentation data that are displayed on the screen. This presentation data is further shown in Fig. 5 and generally involves certain buttons that may be selected by a user to preselect programs for future viewing.

In Sonoda, the PCI is extracted by the TS decoder unit 122 according to the packet ID (PID) specified in the reception control unit 130 (see column 17, lines 42-45). More specifically, the PCI is incorporated within the program mapping table (PMT). When the reception control unit 130 determines that the PMT includes a PCI, then the reception control unit 130 sends the PID associated with the PCI to the TS decoder unit 122. Thus, the TS decoder unit 122 extracts the PCI

corresponding to this PID. See column 19, lines 54-59 and the flow chart shown in Fig. 20.

By reading out the PCI, the reception control unit 130 of Sonoda interprets the screen element information and generates the preselection information image and sends it to the reproducing unit 124 (see column 19, lines 60-67). Reproducing unit 124 then superimposes this preselection information image on the original image. Clearly, the preselection information image corresponds to Fig. 19C and is designated by reference number 1903. This preselection information image is then superimposed onto the original image to generate the superimposed image 1904 shown in Fig. 19D. This permits a user to actually select the episode which has already been preselected in the past.

In sharp contrast, the present invention is not concerned with such a preselection and generation of a preselection information image. Instead, the present invention solves a different problem. Namely, conventional digital broadcast receiving systems store a large quantity of information that is necessary for recording/reproduction in a recording/reproducing information table which is then multiplexed with the digital television signal in a predetermined table form. Upon reception of this signal, conventional systems must use complicated

hardware and methodology since a large number of information types must be rewritten whenever a program is changed.

To solve these problems, the present invention utilizes an elegant method that greatly simplifies the digital broadcast receiver design and methodology. Specifically, the information table is monitored to detect a content change in the information table. This may be done with a very simple structure or method and is claimed as the parameter set means which detects content change of the information table on the basis of a predetermined criterion.

In response to a detected content change, the parameter set means sets the program parameter that has changed as the signal extraction parameter. Claim 1 has been amended so as to more clearly recite this feature. Specifically, the commas added to claim 1 more clearly recite that it is the changed program parameter which is utilized by the parameter set means which sets the changed program parameter as the signal extraction parameter. This signal extraction parameter is then utilized by the signal extraction means to extract the program signal.

Thus, merely by detecting a content change in the information table the claimed invention may simply and rapidly reset the basis for program signal extraction to be the changed program parameter.

These features are certainly not disclosed or suggested by Sonoda. The Office Action attempts to draw parallels between Sonoda's description and the claims but these parallels are heavily strained and fail to present a *prima face* case of obviousness. A closer examination of the Office Action will reveal these deficiencies and strained arguments.

More specifically, the Office Action equates the presentation data to the program signal. This is apparent from page 3 of the Office Action wherein it is alleged that the TS decoder unit 122 outputs the presentation data related to the PID associated with the program control information (PCI). This TS decoder unit 122 and A/V decoder unit 123 are equated with the signal extraction means. From the Office Action page 3 it is apparent that the presentation data is being equated with the program signal which is not a fair comparison particularly in view of the other features of the claim.

More significant is the failure of Sonoda to disclose or suggest detecting content change in the information table. The Office Action expressly admits that Sonoda does not teach this feature but nevertheless concludes that detecting the presence of the PCI in the PMT corresponds to this content change detection. Assuming solely for the sake of argument that this is true, the result would be that the PCI is the changed parameter

in the information table. If that is the case, then the rest of the arguments made in the Office Action fall apart. This is particularly true when reading the other elements of the claim particularly the parameter set means which not only detects content change in the information table but also sets the program parameter that has changed as the signal extraction parameter. Recall that this signal extraction parameter is utilized by the signal extraction means to extract a program signal. Thus, according to the Office Action, the signal extracting means (TS decoder unit 122 and A/B decoder unit 123) extracts program signal on the basis of the signal extraction parameter (PCI as alleged by the Office Action). This is certainly not true.

At best, Sonoda judges whether the PMT includes a PCI and, if it does, extracts the PCI itself from the input data stream. This extracted PCI permits the generation and superposition of the preselection of the preselection information image on the original image. It is not seen how this preselection information image is in any way equivalent to or suggestive of a program signal. Although Sonoda's TS decoding unit 122 does indeed extract the PCI when the reception control unit 130 judges that the PMT includes a PCI, this extraction of the PCI in no way discloses or suggests the signal extraction means for extracting

a program signal from the digital broadcast signal on the basis of the signal extraction parameter, particularly when read in light of the parameter set means which sets the changes program parameter as the signal extraction parameter upon detecting content change in the information table. These features are all specifically recited in claim 1 and the Office Action has failed to present a *prima face* case of obviousness with respect to these features. Indeed, these features are clearly missing from Sonoda and there is no suggestion within Sonoda to add such features.

Again, Sonoda is directed to permitting a user to preselect programs utilizing a PCI which may then be extracted at a later time to superimpose a preselection information image on the original image. Such a teaching certainly does not disclose or suggest a parameter set means that detects content change in an information table and sets the changed program parameter as a signal extraction parameter upon detecting such content change as recited in claim 1. This is particularly true when read in light of the signal extraction means which extracts a program signal (not a preselection information image) from a digital broadcast signal on the basis of the signal extraction parameter.

Likewise, method claim 16 also recites features that clearly distinguish over Sonoda. Particularly, setting the program parameter described in the information table as the signal extraction parameter and then extracting a program signal based on this signal extraction parameter are features not disclosed or suggested by Sonoda, particularly when considering the detecting step which detects content change of the information table and sets the program parameter that has changed as the signal extraction parameter.

For all of the above reasons, taken alone or in combination, Applicant respectfully requests reconsideration and withdrawal of the 35 U.S.C. § 103 Sonoda rejection.

Conclusion

Should the Examiner believe that any outstanding matters remain in the present application, the Examiner is respectfully requested to contact Michael R. Cammarata (Reg. No. 39,491) at the telephone number of the undersigned to discuss the present application in an effort to expedite prosecution.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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